SEQUENCE LISTING

<110>   CHAE, Young-Jin
         CHOI, Eun-Wha

<120>   Recombinant peptide vector comprising the gene for treatment for
         autoimmune diseases

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ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag     180

ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac ttggcagtac     240

atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt aaatggcccg     300

cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag tacatctacg     360

tattagtcat cgctattacc atggtgatgc ggttttggca gtacatcaat gggcgtggat     420
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agcggtttga ctcacgggga tttccaagtc tccaccccat tgacgtcaat gggagtttgt   480

tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc ccattgacgc   540

aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctctc tggctaacta   600

gagaacccac tgcttactgg cttatcgaaa ttaatacgac tcactatagg gagacccaag   660

ctggctagcg tttaaactta agcttcacca tgggtgtact gctcacacag aggacgctgc   720

tcagtctggt ccttgcactc ctgtttccaa gcatggcgag catgtccaaa gggatgcatg   780

tggctcagcc tgcagtggtt ctggccagca gccgggggtgt tgctagcttc gtgtgtgaat   840

atgggtcttc aggcaacgca gccgaggtcc gggtgacagt gctgcggcag gctggcagcc   900

agatgactga agtctgtgcc gcgacataca cagtggagga tgagttggcc ttcctggatg   960

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atgtaggcat gggaaatgga acccagattt atgtcatcga tcctgaacct tgcccagatt   1140

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gcacactgag tggcctgaaa gaccccaagg gtgccacctt cacctggaac ccctccaaag   1320

ggaaggaacc catccagaag aatcctgagc gtgactcctg tggctgctac agtgtgtcca   1380

gtgtcctacc aggctgtgct gatccatgga accatgggga caccttctcc tgcacagcca   1440

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cgccccaggt ccacctgctg ccgccgccgt cggaagagct ggccctcaat gagctggtga   1560

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ccatcgaccg cctggcgggt aaacccaccc acgtcaacgt gtctgtggtc atggcagagg   1860

tggacggcat ctgctactaa tctagagggc ccgtttaaac ccgctgatca gcctcgactg   1920

tgccttctag ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg   1980

aaggtgccac tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga   2040

gtaggtgtca ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg   2100

aagacaatag caggcatgct ggggatgcgg tgggctctat ggcttctgag gcggaaagaa   2160

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ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag   180

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cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag tacatctacg   360

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tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc ccattgacgc   540

- 10 -

aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctctc tggctaacta   600

gagaacccac tgcttactgg cttatcgaaa ttaatacgac tcactatagg gagacccaag   660

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aatggcaagg agtacaagtg caaggtctcc aacaaagccc tcccagcccc catcgagaaa   1620

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ctgtctccgg gtaaatgagt gcgacggccg gcaagccccg ctccccgggc tctcgcggtc   2100

gcacgaggat gcttctagag ggcccgttta aacccgctga tcagcctcga ctgtgccttc   2160

tagttgccag ccatctgttg tttgcccctc ccccgtgcct tccttgaccc tggaaggtgc   2220

cactcccact gtcctttcct aataaaatga ggaaattgca tcgcattgtc tgagtaggtg   2280

tcattctatt ctggggggtg gggtggggca ggacagcaag ggggaggatt gggaagacaa   2340

tagcaggcat gctggggatg cggtgggctc tatggcttct gaggcggaaa gaaccagctg   2400

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<210>   21
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<223>   N-terminal Gly is acetylated, 2nd a.a can be replaced by Ile, 4th
          a.a can be replaced by Leu. 10th a.a can be replaced by Arg, 11th
          a.a can be replaced by Lys, 13th a.a can be replaced by one of

- 12 -

the Leu, Ile, Arg, Gln, Asn and Ser.

<400>   21
Gly Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg Arg Gly Arg Arg Cys
     1   5   10   15

<210>   22
<211>   17
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   Linker-1 DNA: 5' end of C forms ester bond with Cys

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<210>   23
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<223>   Linker-2 DNA   .

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